# The Week That Was: 2020-10-31 (October 31, 2020) Brought to You by SEPP (www.SEPP.org) The Science and Environmental Policy Project

Quote of the Week: "Quantum theory yields much, but it hardly brings us close to the Old One's secrets. I, in any case, am convinced He does not play dice with the universe." Albert Einstein, to Max Born (1926)

Number of the Week: 2%

#### THIS WEEK:

By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

**Knew What?** The above quote illustrates the frustration Einstein had with Quantum Physics because one cannot precisely predict what will happens in nature on the atomic and sub-atomic level. For example, one cannot precisely predict what will happen to a photon when an energized molecule emits it. The photon may go in any direction.

We have built vast industries in electronics and other fields using principles developed in Quantum Physics. These industries include transistors (including computer chips); mobile phones, laptops, tablets etc.; nuclear power; health, magnetic-resonance imaging, or MRI; lasers for DVDs, scanners at store checkouts, industrial cutting of metal, eye surgery, etc.

However, the multi-billion dollar "climate science" industry largely ignores Quantum Physics and the field of physics that incorporates it – Atomic, Molecular, and Optical Physics (AMO) – even though "climate science" depends on computer modeling which requires computers requiring transistors, the understanding of which is based on Quantum Physics.

Herein is the "fatal flaw" of the climate science industry led by the UN Intergovernmental Panel on Climate Change (IPCC) and its followers such as the US Global Change Research Program (USGCRP). They ignore the decades of extensive research into greenhouse effect done by physicists and others who are not part of that establishment.

Based on experiments starting in 1859, Irish physicist John Tyndall explained that certain gases absorb infrared radiation, of longer wavelengths than visible light, going from the earth to space. These gases keep the nighttime temperatures of earth far higher than they would be otherwise, thus keeping the land masses from extreme freezing temperatures at night. Without this effect, it is doubtful complex vegetative and animal life would exist on land. His calculations have been refined, but Tyndall recognized that water vapor was the most important greenhouse gas. Carbon dioxide (CO2) is secondary.

By the end of WWII, the Air Force was interested in how water vapor absorbs and emits electromagnetic radiation. It financed major research efforts through the Air Force Geophysical Laboratories. One report by the Ford Aerospace and Communications Corporation, Aeronutronic [as spelled in the document] Division (1982) on the "Continuum Absorption by H2O." stated:

"Water vapor is responsible for much of the lower-atmosphere absorption in the infrared, millimeter-wave, and microwave windows. Wide variations in the atmospheric temperature and

humidity lead to wide variations in the attenuation in these windows. Although the positions, intensities, and widths of most of the significant H2O[ absorption lines are known, the absorption in the windows cannot be calculated accurately from theoretical considerations alone. Many instruments and complicated systems such as thermal imaging devices, remote sensing systems, seekers, trackers, and laser communications systems are designed to operate in one or more of the atmospheric windows. Thus, a good understanding of the nature of the continuum absorption and the ability to predict it are essential."

A 1946 report from the Columbia Radiation Laboratory, Columbia University, New York, was on "Water Vapor Absorption of Electromagnetic Radiation in the Centimeter Wave-Length Range." Columbia University is now a center for carbon dioxide-caused warming alarmists who ignore previous research.

Those who claim significance by declaring "Exxon Knew" or "Ford Knew" accomplish little. What did they know? Water vapor is an important greenhouse gas that effects the transmission of infrared energy to space. They can also declare: "The Irish Knew." See links under Communicating Better to the Public – Use Yellow (Green) Journalism?, Communicating Better to the Public – Make things up, <a href="https://apps.dtic.mil/dtic/tr/fulltext/u2/a112264.pdf">https://apps.dtic.mil/dtic/tr/fulltext/u2/a112264.pdf</a>, and <a href="https://journals.aps.org/pr/abstract/10.1103/PhysRev.70.300">https://journals.aps.org/pr/abstract/10.1103/PhysRev.70.300</a>

What Do We Know? We know that the greenhouse effect occurs in the atmosphere and cannot be described by a few simple equations. As discussed below, we know rather precisely the CO2 absorption spectrum and how much infrared energy is blocked by CO2 at all CO2 concentrations and altitudes. However, contrary to what many "climate scientists" claim, the entire science of climate is not that well developed. Consequently, we cannot easily model it and any long-term predictions that do not include measurements of the influence of changing greenhouse gas concentrations in the atmosphere are likely wrong.

In the late 1960s, the Air Force Cambridge Research Laboratories (AFCRL) started funding a long-term data base project to acquire detailed knowledge of the infrared properties of the atmosphere known as HITRAN. HITRAN is an acronym for high-resolution transmission molecular absorption database. HITRAN is a compilation of spectroscopic parameters that a variety of computer codes use to predict and simulate the transmission and emission of light in the atmosphere.

"The HITRAN compilation, and its associated database HITEMP (high-temperature spectroscopic absorption parameters), are developed and maintained at the Atomic and Molecular Physics Division, Harvard-Smithsonian Center for Astrophysics under the continued direction of Dr Laurence S. Rothman."

"Before long, the objectives of HITRAN greatly expanded. The spectral range of applicability soon covered the microwave through visible region of the electromagnetic spectrum. In terms of physics, that meant transitions of pure rotation as well as ro-vibration (and even some transitions between different electronic states). The applications also went beyond the simple atmosphere, and many molecules were added that represented trace species in the atmosphere and pollutants in the troposphere. More recently, HITRAN has served the planetary atmospheres community. As a result, the transitions in the database have incorporated more basic parameters, especially those that allow simulation of collisional broadening of spectral lines."

"The current and planned remote-sensing satellite missions had also put new demands on HITRAN for precision and accuracy. The line positions and intensities are being acquired at unprecedented accuracy."

This is probably the finest database in the world on what is happening in the atmosphere, including changes in the greenhouse effect in existence. It is ignored by the IPCC, the USGCRP, and similar organizations supposedly producing climate science and how changes in the greenhouse effect are changing climate.

As discussed in previous TWTWs, AMO physicists William van Wijngaarden and William Happer (W&H) have been trying to get a paper published using this mixture of calculated and experimental data. Western science journals have been treating them as if they are 1920s authors of a shocking novel that will scandalize the puritanical politicians in Boston, leading to the term banned in Boston. Writing in CFACT, David Wojick presents the preprint.

John Kerry claimed that climate science is simple physics. The W&H paper on estimating the change in the greenhouse effect occurring in the atmosphere with additions of carbon dioxide has 15 figures, 5 tables and 92 equations, many of them requiring a command of integral calculus. If Kerry's version of climate science is simple physics, it does not include the greenhouse effect.

Parts of the paper will be presented in this TWTW and discussed further in the next TWTW. The Abstract states:

"The atmospheric temperatures and concentrations of Earth's five most important, greenhouse gases, H2O, CO2, O3, N2O and CH4 control the cloud-free, thermal radiative flux from the Earth to outer space. Over 1/3 million lines having strengths [wavelengths] as low as 10-27 cm [10 to the minus 27<sup>th</sup> power] of the HITRAN database were used to evaluate the dependence of the forcing on the gas concentrations. For a hypothetical, optically thin atmosphere, where there is negligible saturation of the absorption bands, or interference of one type of greenhouse gas with others, the per-molecule forcings are of order 10–22 W [10 to the minus 22<sup>nd</sup> power W] for H2O, CO2, O3, N2O and CH4. For current atmospheric concentrations, the per-molecule forcings of the abundant greenhouse gases H2O and CO2 are suppressed by four orders of magnitude. The forcings of the less abundant greenhouse gases, O3, N2O and CH4, are also suppressed, but much less so. For current concentrations, the per-molecule forcings are two to three orders of magnitude greater for O3, N2O and CH4, than those of H2O or CO2. Doubling the current concentrations of CO2, N2O or CH4 increases the forcings by a few percent. These forcing results are close to previously published values even though the calculations did not utilize either a CO2 or H2O continuum. The change in surface temperature due to CO2 doubling is estimated taking into account radiative-convective equilibrium of the atmosphere as well as water feedback for the cases of fixed absolute and relative humidities as well as the effect of using a pseudoadiabatic lapse rate to model the troposphere temperature. Satellite spectral measurements at various latitudes are in excellent quantitative agreement with modelled intensities."

The W & H paper covers the five most important greenhouse gases, examined from the standpoint of a cloud free atmosphere. Clouds reflect some of the incoming radiation from the sun, but, more importantly for the greenhouse effect, also reduce the outgoing radiation from earth to space. Thus, ideally from the greenhouse perspective, the nighttime warming effect of clouds is eliminated, and the greenhouse effect is considered alone.

In the current atmosphere, with CO2 at about 400 parts per million (400 ppm), the influence of adding a molecule of CO2 is "suppressed by four orders of magnitude", or about one-ten thousands that of the first molecules. Using the language common to those who study this field, both CO2 and water vapor are saturated; increasing these gases will not have a significant impact on the climate of the earth. Such an effect can be described by a logarithmic function, not its inverse, an exponential function which has been used in IPCC reports. Humanity's addition of CO2 to the atmosphere is not causing a "climate crisis."

For a doubling of CO2, W & H have three estimates of the impact of a doubling of CO2. For a fixed <u>absolute</u> humidity and constant lapse rate (drop in temperature with increase in altitude below the tropopause (where water freezes out of the atmosphere)) the estimate is 1.4 K (°C or 2.5°F). For a fixed <u>relative</u> humidity and constant lapse rate the estimate is 2.3 K (°C or 4.1 °F, and for a fixed relative humidity and a pseudoadiabatic lapse rate (condensed water is immediately removed) the estimate is 2.2 K (°C or 4 °F). All these estimates are below the mean estimate used in IPCC reports of 3.0°C

One conclusion of note, to be discussed further next week, is:

"The most striking fact about radiation transfer in Earth's atmosphere is summarized by Figs. 4 and 5. [Not shown here] Doubling the current concentrations of the greenhouse gases CO2, N2O and CH4 increases the forcings by a few percent for cloud-free parts of the atmosphere. Table 3 shows the forcings at both the top of the atmosphere and at the tropopause are comparable to those found by other groups."

As stated by Lindzen previously, doubling of CO2 will have little effect on the earth's climate, a few percent of the total energy flowing onto the earth and out to space. Again, the exponential functions used by the IPCC are pure fantasy. Further, as will be discussed next week, cutting existing CO2 in half will have little effect and the residence time of CO2 in the atmosphere is not particularly meaningful. Carbon dioxide capture is of little or no value. See links under Challenging the Orthodoxy.

Accuracy of the New IPCC Models: Dr. Patrick Frank is a member of the scientific staff of the Stanford Synchrotron Radiation Lightsource/SLAC at Stanford University. According to its website, the National Accelerator Laboratory (SLAC) "is a multi-program national laboratory exploring frontier questions in photon science, astrophysics, biochemistry, material science, particle physics and accelerator research." [Boldface added]

Frank has written extensively on the accuracy, or inaccuracy, of global climate models used by the IPCC. In WUWT he reviews the latest array of models that are available to the public. In his conclusions, Frank states:

"First, CMIP6 models, like their antecedents, project air temperatures as a linear extrapolation of forcing.

Second, CMIP6 climate models, like their antecedents, make large scale simulation errors in cloud fraction.

Third, CMIP6 climate models, like their antecedents, produce LWCF errors enormously larger than the tiny annual increase in tropospheric forcing produced by GHG emissions.

Fourth, CMIP6 climate models, like their antecedents, produce uncertainties so large and so immediate that air temperatures cannot be reliably projected even one year out.

Fifth, CMIP6 climate models, like their antecedents, will have to show about 1000-fold improved resolution to reliably detect a CO2 signal.

Sixth, CMIP6 climate models, like their antecedents, produce physically meaningless air temperature projections.

Seventh, CMIP6 climate models, like their antecedents, have no predictive value."

**A Reporter's Question:** As described in her essay "Science and politics," a reporter asked Judith Curry a question:

"I'm reaching out to scientists this week about the election. How do you feel about it? Which of the candidates has the best plan, for you, in science and technology?"

### Curry's response began:

"I am not happy with either the Democratic or Republican plans for science in the U.S. Both sides seem to want to use and misuse science as a club to further their political agendas. The Republicans seem to prefer to ignore science, while the Democrats cherry pick science to further their political agendas."

No doubt many scientifically minded readers will embrace her entire response. TWTW would make two small exceptions regarding the Republican plans. One exception is the appointment of David Legates to Deputy Assistant Secretary of Commerce for Environmental Observation and Prediction at NOAA. As discussed in the September 19 TWTW, Legates has produced over 100 papers on climate, precipitation and similar topics and has openly questioned the rigor of the reports by the USGCRP, a follower of the IPCC. With these organizations, assertions have become more important than evidence supporting them.

The second exception is the recent appointment of Ryan Maue as chief scientist at NOAA. He is an outstanding weather modeler in the finest sense, evidence based. With a few notable exceptions, such as the National Hurricane Center, NOAA's modeling is poor. Its long-term climate forecasts including sea level rise, etc., are absurd. These include forecasts of exponential increases in sea levels. The recent shift to naming meaningless, minor storms in the middle of the Atlantic is another example of how far NOAA has drifted from its major mission, as stated on its website:

"To understand and predict changes in climate, weather, oceans, and coasts, to share that knowledge and information with others, and to conserve and manage coastal and marine ecosystems and resources."

### The website also states:

"NOAA is an agency that enriches life through science. Our reach goes from the surface of the sun to the depths of the ocean floor as we work to keep the public informed of the changing environment around them.

"From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration and supporting marine commerce, NOAA's products and services support economic vitality and affect more than one-third of America's gross domestic product. NOAA's dedicated scientists use cutting-edge research and high-tech instrumentation to provide citizens, planners, emergency managers and other decision makers with reliable information they need when they need it."

Yet, sections of NOAA ignore the scientific method which includes evaluating theories, hypotheses, and assumptions against all the scientific evidence, not just the evidence that supports political desires.

Maue recognizes the importance of evidence. One example is his use of the accumulated cyclone energy (ACE) which expresses the energy of tropical cyclones during their lifetime. In general, storms in the Pacific are more important than those in the Atlantic. According to these calculations, the total frequency and energy is not increasing.

NOAA's Top Scientist? Almost amusingly, Ryan Maue is replacing a career bureaucrat at NOAA, who was assistant administrator for oceanic and atmospheric research and acting chief scientist. His professional background was the practice of marine resource law. Immediately, some news organizations identified him as NOAA's top scientist. That seems to be the Washington Press Corps' understanding of science. See links under Change in US Administrations and <a href="https://www.aspenideas.org/speakers/craig-mclean">https://www.aspenideas.org/speakers/craig-mclean</a>

**Number of the Week: 2%.** It is worth repeating, according to reports by W & H above, and others, a doubling of today's CO2, and associated increase in water vapor, will not reduce infrared

energy flowing from the surface to space by more than 2 %, and may be far less. Thus, there is no run-away greenhouse, no tipping point, no climate crisis, etc.

#### **NEWS YOU CAN USE:**

### Commentary: Is the Sun Rising?

# The sun, the sea and European temperatures

By John Robson, Climate Discussion Nexus, Oct 28, 2020

https://climatediscussionnexus.com/2020/10/28/the-sun-the-sea-and-european-temperatures/

"Even the notion of what causes what is still up for grabs. In the paper on European temperatures, they find that solar variations don't directly affect European temperatures except in a few locations, but they also note that maybe they affect the ocean cycles which in turn strongly affect temperatures, so it might be down to the sun after all."

### **Censorship**

# Twitter: Double Standards & Advertising

By Donna Laframboise, Big Picture News, Oct 28, 2020

https://nofrakkingconsensus.com/2020/10/28/twitter-double-standards-advertising/

"Twitter earns billions from advertising. But restricts Trump tweets on the grounds they might mislead."

[SEPP Comment: What politician does not mislead?]

# Suppressing Scientific Inquiry

# Academic Freedom? The Peter Ridd Case is Part of a Much Larger Problem with Australian Universities

By Eric Worrall, WUWT, Oct 27, 2020

 $\frac{https://wattsupwiththat.com/2020/10/27/academic-freedom-the-peter-ridd-case-is-part-of-a-much-larger-problem-with-australian-universities/$ 

# Winning! Australian Govt writes laws to protect people like Peter Ridd at universities By Jo Nova, Her Blog, Oct 31, 2020

http://joannenova.com.au/2020/10/winning-australian-govt-writes-laws-to-protect-people-like-peter-ridd-at-universities/

"The Australian government admits Peter Ridd should never have been sacked for criticizing standards of James Cook University"

### Challenging the Orthodoxy -- NIPCC

### Climate Change Reconsidered II: Physical Science

Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2013

https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf

*Summary*: https://www.heartland.org/\_template-assets/documents/CCR/CCR-II/Summary-for-Policymakers.pdf

### **Climate Change Reconsidered II: Biological Impacts**

Idso, Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2014

http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/

Summary: https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf

# **Climate Change Reconsidered II: Fossil Fuels**

By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019

http://store.heartland.org/shop/ccr-ii-fossil-fuels/

Download with no charge:

http://climatechangereconsidered.org/wp-content/uploads/2019/01/Climate-Change-

Reconsidered-II-Fossil-Fuels-FULL-Volume-with-covers.pdf

### Why Scientists Disagree About Global Warming

The NIPCC Report on the Scientific Consensus

By Craig D. Idso, Robert M. Carter, and S. Fred Singer, Nongovernmental International Panel on Climate Change (NIPCC), Nov 23, 2015

http://climatechangereconsidered.org/

Download with no charge:

https://www.heartland.org/policy-documents/why-scientists-disagree-about-global-warming

### Nature, Not Human Activity, Rules the Climate

S. Fred Singer, Editor, NIPCC, 2008

http://www.sepp.org/publications/nipcc\_final.pdf

#### Global Sea-Level Rise: An Evaluation of the Data

By Craig D. Idso, David Legates, and S. Fred Singer, Heartland Policy Brief, May 20, 2019 https://www.heartland.org/ template-assets/documents/publications/SeaLevelRiseCCRII.pdf

### Challenging the Orthodoxy

# Study suggests no more CO2 warming

By David Wojick, CFACT, Oct 26, 2020

https://www.cfact.org/2020/10/26/study-suggests-no-more-co2-warming/

Link to paper: Dependence of Earth's Thermal Radiation on Five Most Abundant Greenhouse Gases

By W. A. van Wijngaarden and W. Happer, Atmospheric and Oceanic Physics, submitted June 4, 2020

https://arxiv.org/abs/2006.03098

Link to prepublication version: <a href="https://arxiv.org/pdf/2006.03098.pdf">https://arxiv.org/pdf/2006.03098.pdf</a>

### Roger Revelle – the backstory of the father of Atmospheric CO2 monitoring

By Andy May, WUWT, Oct 31, 2020

https://wattsupwiththat.com/2020/10/31/roger-revelle/

#### Meet the Climate Scientists That Social Media Censors Don't Want You to Know About

By Gregory Wrightstone, Daily Signal, Oct 27, 2020 [H/t Gordon Fulks]

https://www.dailysignal.com/2020/10/27/meet-the-climate-scientists-that-social-media-censors-dont-want-you-to-know-about/?utm\_source=rss&utm\_medium=rss&utm\_campaign=meet-the-climate-scientists-that-social-media-censors-dont-want-you-to-know-

<u>about&utm\_source=Meet+the+Climate+Scientists&utm\_campaign=Meet+the+Climate+Scientists&utm\_s&utm\_email</u>

### **CMIP6 Update**

By Pat Frank, WUWT, Oct 27, 2020

https://wattsupwiththat.com/2020/10/27/cmip6-update/

#### War On Science

By Tony Heller, His Blog, Oct 26, 2020

https://realclimatescience.com/2020/10/war-on-science/

### **Defending the Orthodoxy**

# Air pollution killed 500k newborns in 2019: global study

By Staff Writers, Washington (AFP), Oct 21, 2020

https://www.terradaily.com/reports/Air\_pollution\_killed\_500k\_newborns\_in\_2019\_global\_study\_999.html

Though not identified, possible link to study: State of Global Air, 2020

By Staff, Health Effects Institute. Institute for Health Metrics and Evaluation's Global Burden of Disease project. 2020

file:///C:/Users/Owner/Downloads/soga-2020-report-10-26 0.pdf

[SEPP Comment: According to Figure 3 in the report, high income areas have low death rates from PM2.5. In general, the report does not discuss types of fuels, except "solid fuels for cooking."]

# Africa climate change report reveals heat rising north and south, Sahel getting wetter

Press Release UN News, Oct 26, 2020

https://news.un.org/en/story/2020/10/1076162

Link to report: State of the Climate in Africa, 2019

Climate change increasingly threatens human health, food and water security and socio-economic development in Africa

By Staff, World Meteorological Organization, Oct 26, 2020

 $\frac{https://public.wmo.int/en/media/press-release/multi-agency-report-highlights-current-and-future-state-of-climate-africa}{}$ 

# President Steinmeier: "Without people like Edenhofer, the Paris Agreement and the German climate deal would not have been possible."

By Staff, Potsdam Institute for Climate Impact Research, Oct 25, 2020 [H/t Dennis Ambler] <a href="https://www.pik-potsdam.de/en/news/latest-news/president-steinmeier-201cwithout-people-like-edenhofer-the-paris-agreement-and-the-german-climate-deal-would-not-have-been-possible.201d">https://www.pik-potsdam.de/en/news/latest-news/president-steinmeier-201cwithout-people-like-edenhofer-the-paris-agreement-and-the-german-climate-deal-would-not-have-been-possible.201d</a>

### Declines in shellfish species on rocky seashores match climate-driven changes

Two decades of data document a dwindling of mussels, barnacles and snails

A new study documents the decline of intertidal species on Swan's Island in the Gulf of Maine. Press Release, NAF, Oct 26, 2020

https://www.nsf.gov/discoveries/disc\_summ.jsp?cntn\_id=301502&WT.mc\_id=USNSF\_1

Link to paper: Declines over the last two decades of five intertidal invertebrate species in the western North Atlantic

By Peter S. Petraitis & S. R. Dudgeon, Communications Biology, Oct 20, 2020 <a href="https://www.nature.com/articles/s42003-020-01326-0">https://www.nature.com/articles/s42003-020-01326-0</a>

"Mussel recruitment is declining by 15.7% per year, barnacle recruitment by 5.0% per year,..."

"Because of climate change, the Gulf of Maine has recently warmed faster than 99.9% of the global oceans..."

[SEPP Comment: With a decline of 15.7% per year, after ten years mussel recruitment would be below 20% of original, after twenty years, less than 4% of original. Based on these numbers, no new mussels are forming? A decline also occurred in the 1950s. Given the mussel harvest in Massachusetts, the claim is unlikely. Could the decline be from overfishing and increases in European green crabs, an invasive species associated with crashes in shellfish populations?]

### Questioning the Orthodoxy

### Sending words to do the work of deeds

By John Robson, Climate Discussion Nexus, Oct 28, 2020 <a href="https://climatediscussionnexus.com/2020/10/28/sending-words-to-do-the-work-of-deeds/">https://climatediscussionnexus.com/2020/10/28/sending-words-to-do-the-work-of-deeds/</a> Unaccountable political promises

### Renewable Energy Will Not Solve The Problem Admits Harrabin

By Paul Homewood, Not a Lot of People Know That, Oct 26, 2020

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2020/10/26/renewable-energy-will-not-solve-the-problem-admits-harrabin/\#more-47150}$ 

[SEPP Comment: For those who believe in fairy tales, but are they Walt Disney's or Grimms'?]

# Where'd the ozone go?

By John Robson, Climate Discussion Nexus, Oct 28, 2020 <a href="https://climatediscussionnexus.com/2020/10/28/whered-the-ozone-go/">https://climatediscussionnexus.com/2020/10/28/whered-the-ozone-go/</a>

"When the hole was recently found to be growing again the immediate response was that we need to enforce the Montreal Protocol. But it has been in force since 1987 and by common consent has been successfully enforced at the global level for decades. So a few people asked another question: What if we don't really understand the atmosphere as well as we thought?"

### Don't let it snow

By John Robson, Climate Discussion Nexus, Oct 28, 2020 <a href="https://climatediscussionnexus.com/2020/10/28/dont-let-it-snow/">https://climatediscussionnexus.com/2020/10/28/dont-let-it-snow/</a>

"But as we have noted and will continue doing until it becomes as tedious as shoveling snow in February, in real science a theory lives, or dies, by its predictive power. If you say winter is going to disappear it has to, or you are wrong."

### After Paris!

# We Really Might Always Have Paris

By Christopher Horner, The Pipeline, Oct 23, 2020 <a href="https://the-pipeline.org/we-really-might-always-have-paris/">https://the-pipeline.org/we-really-might-always-have-paris/</a>

# Aussie PM Defies Pressure to Set a Net Zero 2050 Climate Target

By Eric Worrall, WUWT, Oct 28, 2020

 $\underline{https://wattsupwiththat.com/2020/10/28/aussie-pm-defies-pressure-to-set-a-net-zero-2050-climate-target/}$ 

# Japan's carbon neutral pledge looks like a load of hot air

By Philip Patrick, The Spectator, UK, Oct 28, 2020 [H/t GWPF]

https://www.spectator.co.uk/article/japan-s-carbon-neutral-pledge-looks-like-a-load-of-hot-air

### New Japan PM Pledges to Match China's Zero Carbon 2050 Initiative

By Eric Worrall, WUWT, Oct 26, 2020

https://wattsupwiththat.com/2020/10/26/new-japan-pm-pledges-to-match-chinas-zero-carbon-2050-initiative/

"My question, with a population density of 899 people per square mile, where do they plan to put the required renewable energy infrastructure?"

[SEPP Comment: Why allow physical restrictions to interfere with grand promises about things long after a politician is gone?]

### Change in US Administrations

#### **NOAA's Chief Scientist Sacked**

By Paul Homewood, Not a Lot of People Know That, Oct 30, 2020

https://notalotofpeopleknowthat.wordpress.com/2020/10/30/noaas-chief-scientist-sacked/

"As for Craig McLean, he is not the 'Top Scientist', as described by the Mail. He is in fact a lawyer, who has filled administrative roles at NOAA for many years. As such, he has carried out the political agenda of Obama and previous Presidents."

Top NOAA scientist is removed from his position after he asked new Trump-appointed staff

**to** adhere to the agency's integrity policy that bans changing research data to fit political agenda By Karen Ruiz, Daily Mail, Oct 29, 2020

https://www.dailymail.co.uk/news/article-8888735/Trump-administration-fires-NOAA-scientist.html

[SEPP Comment: See link immediately above.]

# Trump strips protections for Tongass forest, opening it to logging

By Rebecca Beitsch and Rachel Frazin, The Hill, Oct 28, 2020

 $\frac{https://thehill.com/policy/energy-environment/523145-trump-strips-protections-for-tong ass-forest-opening-it-to-logging$ 

#### Problems in the Orthodoxy

# Peter Foster: The IEA's solar spin cycle

Sorry folks, the world will still be overwhelmingly fossil-fuelled in 2030

By Peter Foster, Financial Post, Canada, Oct 21, 2020

https://financialpost.com/opinion/peter-foster-the-ieas-solar-spin-cycle

"According to the IEA, at a time when governments' response to COVID has been a global shambles, now is the time to place more faith in government. "A surge in well-designed energy policies is needed to put the world on track for a resilient energy system that can meet climate goals." But bad policy isn't improved by positive adjectives, and wishes aren't horsepower."

### Japan's carbon neutral pledge looks like a load of hot air

By Philip Patrick, The Spectator, UK, Oct 28, 2020 [H/t GWPF]

https://www.spectator.co.uk/article/japan-s-carbon-neutral-pledge-looks-like-a-load-of-hot-air

### Seeking a Common Ground

### Science and politics

By Judith Curry, Climate Etc. Oct 26, 2020

https://judithcurry.com/2020/10/26/science-and-politics/#more-26687

### Philip Cross: The sensible approach to climate change

Adaptation plays a critical role in any realistic and honest climate plan

By Philip Cross, Special to Financial Post, Financial Post (Canada), Sep 24, 2020

https://financialpost.com/opinion/philip-cross-the-sensible-approach-to-climate-change?mc\_cid=b157bff4f1&mc\_eid=da9b256360

### Science, Policy, and Evidence

# Policy making during crises: how diversity and disagreement can help manage the politics of expert advice

By Alfred Moore, The BMJ (formerly British Medical Journal), Oct 26, 2020

https://www.bmj.com/content/371/bmj.m4039

Summary by GWPF:

https://www.thegwpf.com/policy-making-during-crises-how-diversity-and-disagreement-can-help-manage-the-politics-of-expert-advice/

### **Response to the Australian Bushfire Commission**

By Eric Worrall, WUWT, Oct 30, 2020

https://wattsupwiththat.com/2020/10/30/response-to-the-australian-bushfire-commission/

### **DOE** Accomplishments Pushing American Economy to New Heights

By Dan Brouillette, Real Clear Energy, Oct 27, 2020

https://www.realclearenergy.org/articles/2020/10/27/doe\_accomplishments\_pushing\_american\_economy\_to\_new\_heights\_582132.html

Dan Brouillette is the U.S. Secretary of Energy.

# Victorious New Zealand PM Urged to Apply Covid-19 Lessons to the Climate Crisis

By Eric Worrall, WUWT, Oct 24, 2020

https://wattsupwiththat.com/2020/10/24/victorious-new-zealand-pm-urged-to-apply-covid-19-lessons-to-the-climate-crisis/

### Review of Recent Scientific Articles by CO2 Science

# The Impact of Elevated CO2 on a Key Antioxidant in Lettuce

Shimomura, M., Yoshida, H., Fujiuchi, N., Ariizumi, T. Ezura, H. and Fukuda, N. 2020.

Continuous blue lighting and elevated carbon dioxide concentration rapidly increase chlorogenic acid content in young lettuce plants. *Scientia Horticulturae* 272: 109550,

doi.org/10.1016/j.scienta.2020.109550, Oct 30, 2020

http://www.co2science.org/articles/V23/oct/a13.php

"Consequently, in light of the above, it would appear that as the air's CO2 concentration rises in the years and decades ahead, the chlorogenic acid content of lettuce will increase, producing more of this effective antioxidant for human consumption and health care. And that is good news worth reporting."

### The Response of Juvenile Pink Salmon to Ocean Acidification

Frommel, A.Y., Carless, J., Hunt, B.P.V. and Brauner, C.J. 2020. Physiological resilience of pink salmon to naturally occurring ocean acidification. *Conservation Physiology* 8, DOI:

10.1093/conphys/coaa059. Oct 28, 2020

http://www.co2science.org/articles/V23/oct/a12.php

"In considering all of the above, Frommel et al. write 'these findings indicate that levels of CO2 up to  $2000~\mu$ atm for two weeks at this life stage of pink salmon are not associated with physiological impairment as measured in this study and have only a small effect on simultaneous acute stressors,' adding 'pink salmon populations that experience high CO2 levels in their yearly migration may be pre-adapted to high CO2 levels."

### **Investigating Plant-herbivore Interactions Under Drought and Heat Stress**

Xie, H., Shi, J., Shi, F., Xu, H., He, K. and Wang, Z. 2020. Aphid fecundity and defenses in wheat exposed to a combination of heat and drought stress. *Journal of Experimental Botany* 71: 2713-2722. Oct 26, 2020

http://www.co2science.org/articles/V23/oct/a11.php

### Models v. Observations

# Great Britain September Mean Temperatures Cooling. Also: Models Suggest Harsh, Long Winter Ahead

By Kirye and Pierre Gosselin, No Tricks Zone, Oct 24, 2020

https://notrickszone.com/2020/10/24/great-britain-september-mean-temperatures-cooling-also-models-suggest-harsh-long-winter-ahead/

### Measurement Issues -- Surface

### The War on Science

By Tony Heller, His blog, Oct 26, 2020

https://newtube.app/user/TonyHeller/g9ovxWZ

"The algorithms are working as designed.' – NOAA"

### Was September 2020 the warmest September on record?

By David Whitehouse, GWPF, Oct 29, 2020

https://www.thegwpf.com/was-september-2020-the-warmest-september-ever/

### **Changing Weather**

# Astonishing cold and unusual early season snow..."Zeta" to make landfall later in southeastern Louisiana

Guest Post by Paul Dorian, Perspecta, Via GWPF, Oct 28, 2020

 $\underline{https://wattsupwiththat.com/2020/10/28/astonishing-cold-and-unusual-early-season-snowzeta-to-make-landfall-later-in-southeastern-louisiana/}$ 

### Frost, Record-Breaking Cold Temperatures, and Strange Weather Features

By Cliff Mass, Weather Blog, Oct 25, 2020

https://cliffmass.blogspot.com/2020/10/frost-record-breaking-cold-temperatures.html

"If you want to see an image that is a bit deceptive but a lot of fun, below is the current percentage of normal snowpack from the US Snotel network: TWO THOUSAND PERCENT OF NORMAL over NE Washington and nearly 1000% of normal over the north Cascades. Values that might cause inveterate skiers to run for their equipment! But this early in the season, such percentages mean little, as do the crazy low values we observed in late spring."

### When is the foggiest time of the year in the Northwest?

By Cliff Mass, Weather Blog, Oct 29, 2020

https://cliffmass.blogspot.com/2020/10/when-is-foggiest-time-of-year-in.html

"The clouds and storms have not moved in permanently, leaving periods of cloud-free conditions that allow good infrared cooling to space."

### What cold lizards in Miami can tell us about climate change resilience

News Release, Washington University in St. Louis, Oct 20, 2020 [H/t WUWT] https://www.eurekalert.org/pub\_releases/2020-10/wuis-wcl101620.php

[SEPP Comment: Animals that have survived warming and cooling of the planet are more tolerant of temperature change than these researchers thought?]

# **Changing Climate**

# Antarctica yields oldest fossils of giant birds with 21-foot wingspans

By Staff Writers, Berkeley CA (SPX), Oct 28, 2020

https://www.terradaily.com/reports/Antarctica\_yields\_oldest\_fossils\_of\_giant\_birds\_with\_21\_foot wingspans 999.html

Link to paper: Earliest fossils of giant-sized bony-toothed birds (Aves: Pelagornithidae) from the Eocene of Seymour Island, Antarctica

By Peter A. Kloess, Ashley W. Poust & Thomas A. Stidham, Scientific Reports, Oct 26, 2020 <a href="https://www.nature.com/articles/s41598-020-75248-6">https://www.nature.com/articles/s41598-020-75248-6</a>

### **Changing Seas**

### EU report about vanishing beaches was alarmist and wrong, scientists say

By Staff, The Times, Oct 27, 2020

https://www.thegwpf.com/false-alarm-eu-report-about-vanishing-beaches-was-alarmist-and-wrong-scientists-say/

Link to paper: Sandy coastlines under threat of erosion

By Michalis I. Vousdoukas, et al. Nature Climate Change, March 20, 2020

https://www.nature.com/articles/s41558-020-0697-0

Rebuttal: Sandy beaches can survive sea-level rise

By J. A. G. Cooper, Nature Climate Change, Oct 27, 2020

https://www.nature.com/articles/s41558-020-00934-2

### Changing Cryosphere – Land / Sea Ice

# "Where's the sea ice?" Right where it's been for most of the Holocene.

By David Middleton, WUWT, Oct 30, 2020

 $\underline{https://wattsupwiththat.com/2020/10/30/wheres-the-sea-ice-right-where-its-been-for-most-of-the-holocene/}$ 

### Where's the sea ice? 3 reasons the Arctic freeze is unseasonably late and why it matters

By Mark Serreze, US National Snow and Ice Data Center, The Conversation, Oct 28, 2020 [H/t WUWT]

 $\frac{https://theconversation.com/wheres-the-sea-ice-3-reasons-the-arctic-freeze-is-unseasonably-late-and-why-it-matters-148918$ 

See link immediately above.

# 3 More New Studies Show Modern Arctic Sea Ice Extent Is Greater Than Nearly Any Time In The Last 10,000 Years

By Kenneth Richard, No Tricks Zone, Oce 29, 2020

https://notrickszone.com/2020/10/29/3-more-new-studies-show-modern-arctic-sea-ice-extent-is-greater-than-nearly-any-time-in-the-last-10000-years/

Link to one study: Deglacial to Holocene variability in surface water characteristics and major floods in the Beaufort Sea

By Junjie Wu, et al, Communications earth & Environment, Oct 2, 2020 https://www.nature.com/articles/s43247-020-00028-z

### Irregular appearances of glacial and interglacial climate states

By Staff Writers, Bremerhaven, Germany (SPX), Oct 28, 2020

https://www.spacedaily.com/reports/Irregular\_appearances\_of\_glacial\_and\_interglacial\_climate\_s tates 999.html

Link to paper: Interglacials of the Quaternary defined by northern hemispheric land ice distribution outside of Greenland

By Peter Köhler & Roderik S. W. van de Wal, Nature Communications, Oct 12, 2020 https://www.nature.com/articles/s41467-020-18897-5

### The arrival of seabirds transformed the Falkland Islands 5,000 years ago

By Brooks Hays, Washington DC (UPI), Oct 23, 2020

https://www.spacedaily.com/reports/The\_arrival\_of\_seabirds\_transformed\_the\_Falkland\_Islands\_5000\_years\_ago\_999.html

### **Changing Earth**

### Lost and found: Geologists 'resurrect' missing tectonic plate

Researchers locate long-debated plate in Canada using 3D mapping technology News Release, NSF, Oct 27, 2020

https://www.nsf.gov/discoveries/disc summ.jsp?cntn id=301516&WT.mc id=USNSF 1

Link to paper: Raising the Resurrection plate from an unfolded-slab plate tectonic reconstruction of northwestern North America since early Cenozoic time

By Spencer Fuston and Jonny Wu, GSA Bulletion, oct 19, 2020

https://pubs.geoscienceworld.org/gsa/gsabulletin/article-

abstract/doi/10.1130/B35677.1/592051/Raising-the-Resurrection-plate-from-an-

unfolded?redirectedFrom=fulltext

### Acidic Waters

# The future is now: Long-term research shows ocean acidification ramping up on the Great Barrier Reef

News Release by Australian Institute of Marine Science, Oct 28, 2020 [H/t Bernie Kepshire] <a href="https://phys.org/news/2020-10-future-long-term-ocean-acidification-ramping.html">https://phys.org/news/2020-10-future-long-term-ocean-acidification-ramping.html</a>

Link to one paper: Progressive seawater acidification on the Great Barrier Reef continental shelf By Katharina Fabricius, et al. Nature, Oct 27, 2020

https://www.nature.com/articles/s41598-020-75293-1

Link to second paper: Shifts in coralline algae, macroalgae, and coral juveniles in the Great Barrier Reef associated with present-day ocean acidification

By Joy Smith, et al. (some of the same authors as above) Global Change Biology, Feb 12, 2020 <a href="https://onlinelibrary.wiley.com/doi/10.1111/gcb.14985">https://onlinelibrary.wiley.com/doi/10.1111/gcb.14985</a>

[SEPP Comment: As Janifer Marohasy has demonstrated with recent photos of "dying" sections of the reef, the announcements of death are premature.]

### Agriculture Issues & Fear of Famine

# Different type of photosynthesis may save crops from climate change

By Brooks Hays, Washington DC (UPI), Oct 23, 2020

https://www.seeddaily.com/reports/Different\_type\_of\_photosynthesis\_may\_save\_crops\_from\_cli\_mate\_change\_999.html

Link to paper not given, Suggestion: Alternative CAM Modes Provide Environment-Specific Water-Saving Benefits in a Leaf Metabolic Model

By Nadine Töpfer, et al. The Plant Cell, Oct 21, 2020

http://www.plantcell.org/content/early/2020/10/22/tpc.20.00132

### **Lowering Standards**

### **BBC Still Don't Understand Paris Agreement**

By Paul Homewood, Not a Lot of People Know That, Oct 24, 2020

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2020/10/24/bbc-still-dont-understand-parisagreement/}$ 

"The BBC are much like the old Soviets – they lie so much about climate change that they end up believing their own lies:"

# National Academy of Sciences Declares Global Warming Contributes Hot and Cold Severe Weather

By Eric Worrall, WUWT, Oct 29, 2020

https://wattsupwiththat.com/2020/10/29/national-academy-of-sciences-declares-global-warming-contributes-to-severe-weather-hot-or-cold/

[SEPP Comment: Language nonsense of the IPCC is being used by National Academy of Sciences. Medium confidence replaces inconclusive. How about medium unknown?]

# **BBC's Roger Harrabin criticised for political activism 'masquerading as science'** By Staff, GWPF, Oct 29, 2020

https://www.thegwpf.com/bbcs-roger-harrabin-criticised-for-political-activism-masquerading-asscience/

"Mallen Baker, the former co-chair of the Green Party, has criticised the BBC's Roger Harrabin's for "public policy activism masquerading as science" – pushing a position, while pretending to be reporting expert evidence."

### Communicating Better to the Public – Use Yellow (Green) Journalism?

Aerial images detect and track food security threats for millions of African farmers By Staff Writers, Palmira, Colombia (SPX), Oct 23, 2020

https://www.seeddaily.com/reports/Aerial\_images\_detect\_and\_track\_food\_security\_threats\_for\_millions of African farmers 999.html

Link to paper: Detection of banana plants and their major diseases through aerial images and machine learning methods: A case study in DR Congo and Republic of Benin

By Michael Gomez Selvaraj, et al. ISPRS Journal of Photogrammetry and Remote Sensing, Nov 2020

https://www.sciencedirect.com/science/article/pii/S0924271620302410?via%3Dihub

### **Another Major Breakthrough For Solar Energy**

By Alex Kimani, Oil Price.com, Oct 20, 2020

https://oilprice.com/Alternative-Energy/Solar-Energy/Another-Major-Breakthrough-For-Solar-Energy.html

"The timing appears perfect, too, with solar tipped to dominate the global electricity scene over the next couple of decades."

# Bjorn Lomborg: Joe Biden's US\$2 trillion climate plan could fix it

By Bjorn Lomborg, New Zealand Herald, Oct 20, 2020

 $\frac{https://www.nzherald.co.nz/world/bjorn-lomborg-joe-bidens-us2-trillion-climate-plan-could-fix-it/KSJ5P3LEHLJQ6EOT7S256SZPGM/?mc\_cid=b157bff4f1\&mc\_eid=da9b256360$ 

[SEPP Comment: In his email, Lomborg said: "One inexpensive idea in Biden's \$2 trillion climate plan could finally fix global warming." That idea is more Research and Development into

alternative energy sources. The Los Angeles Daily News got the emphasis correct, the New Zealand Herald did not.]

# Ford, GM scientists knew in 1960s that emissions caused climate change: report

By Rachel Frazin, The Hill, Oct 26, 2020

 $\underline{https://thehill.com/policy/transportation/522762-automakers-knew-1960s-emissions-caused-climate-change-report}$ 

### Half-measures won't save nature, scientists warn

By Marlowe Hood, Paris (AFP), Oct 22, 2020

https://www.terradaily.com/reports/Half-measures\_wont\_save\_nature\_scientists\_warn\_999.html [SEPP Comment: No link to study.]

# Communicating Better to the Public – Exaggerate, or be Vague?

### Henderson the climate king

By John Robson, Climate Discussion Nexus, Oct 28, 2020

https://climatediscussionnexus.com/2020/10/28/henderson-the-climate-king/

"Oh well then. If 'scientists say' it must be OK to cause disaster for billions through reckless arrogance. Just ask Dr. Strangelove."

### Dealing with climate change requires more fight and less flight

By Dawn Stover, Bulletin of the Atomic Scientists, Oct 26, 2020

https://thebulletin.org/2020/10/dealing-with-climate-change-requires-more-fight-and-less-flight/ [SEPP Comment: According to the website, for 75 years the group has used the Doomsday Clock predicting Nuclear Risk; now extended to Climate Change; Disruptive Technologies; COVID-19. As in the past, the Doomsday Clock is approaching midnight. Why believe it?]

### Communicating Better to the Public – Make things up.

# 'Death sentence on nature': MEPs accused of turning European agricultural policy into 'extinction machine'

'There are no reasons to spend a third of the EU budget on industrial agriculture which drives biodiversity loss and worsens the climate crisis,' says critic

By Jane Dalton, Independent, Oct 23, 2020

https://www.independent.co.uk/environment/eu-agricultural-policy-cap-mep-vote-reform-farming-climate-change-extinction-b1226540.html

### Economic growth is bad for the climate, Europe's Science Academies claim

By Staff, GWPF & The Daily Telegraph, Via GWPF, Oct 30, 2020

https://www.thegwpf.com/socialist-science-economic-growth-is-bad-for-the-climate-europes-science-academies-claim/

### The #ExxonKnew Lie Spreads to Motor City

By David Middleton, WUWT, Oct 28, 2020

https://wattsupwiththat.com/2020/10/28/the-exxonknew-lie-spreads-to-the-automakers/

### Communicating Better to the Public – Do a Poll?

### **Sceptics with emissions**

By John Robson, Climate Discussion Nexus, Oct 28, 2020

https://climatediscussionnexus.com/2020/10/28/sceptics-with-emissions/

"It adds that for some reason 'people in Southern Europe and Latin America are the most likely to see climate change as a serious threat' and moreover that 'education played a large role in shaping attitudes towards climate change, people with 16 or more years of education were more likely than those with 8 years of education to say climate change is a 'very serious' threat.""

# Communicating Better to the Public – Use Children for Propaganda

# Greta Melts Down In Reaction To EU Parliament Vote In Favor Of CAP. "We Won't Forget"!

By P Gosselin, No Tricks Zone, Oct 23, 2020

https://notrickszone.com/2020/10/23/greta-melts-down-in-reaction-to-eu-parliament-vote-in-favor-of-cap-we-wont-forget/

### Communicating Better to the Public – Protest

### Thousands of climate activists appeal to Brussels to withdraw farming policy

By Catherine Bennett, France 24, Oct 25, 2020 [H/t GWPF]

 $\underline{https://www.france24.com/en/europe/20201025\text{-}thousands-of-climate-activists-appeal-to-brussels-to-withdraw-farm-policy}$ 

# Extinction Rebellion doorstep David Attenborough after he criticises their extremism

The Staff, The Times, Via GWPF, Oct 27, 2020

https://www.thegwpf.com/extinction-rebellion-doorstep-david-attenborough/

### Expanding the Orthodoxy

### UN-linked plan charts US course to net-zero carbon emissions by 2050

By Rebecca Beitsch, The Hill, Oct 27, 2020

https://thehill.com/policy/energy-environment/522845-un-linked-plan-charts-us-course-to-net-zero-carbon-emissions-by

"A United Nations-linked initiative is offering what it bills as a possible road map for the U.S. to tackle climate change under a potential new administration."

"The Zero Carbon Action Plan (ZCAP), crafted by roughly 100 individuals spanning academia and think tanks, would help the U.S. reach the goals of the Paris Climate Accord and hit net-zero carbon emissions by 2050."

# **UN:** Urgent Climate Action Required to PREVENT the Greening of the Sahara Desert By Eric Worrall, WUWT, Oct 28, 2020

 $\underline{https://wattsupwiththat.com/2020/10/28/un-urgent-climate-action-required-to-prevent-the-greening-of-the-sahara-desert/}$ 

### New website puts climate in your hands

By Staff Writers, Paris (ESA), Oct 22, 2020

https://www.terradaily.com/reports/New\_website\_puts\_climate\_in\_your\_hands\_999.html Link to new ESA website

https://cfs.climate.esa.int/index.html#/?globe=SI12.67I41.83I25003000.00I360.00I-90.00I0.00I0.00I0.00II

"From the vantage point of space, users can see for themselves how atmospheric greenhouse gases are rising, glaciers are retreating, and ice sheets are diminishing; and explore patterns of wildfires from the Arctic Circle, to the Amazon rainforest, and across the Australian bush."

### Questioning European Green

### Suckered by Big Wind in the UK

By Rupert Darwall, Real Clear Energy, Oct 29, 2020

https://www.realclearenergy.org/articles/2020/10/29/suckered\_by\_big\_wind\_in\_the\_uk\_582362.html

[SEPP Comment: Explains why replacing coal and gas power plants with solar and wind increases the likelihood of the grid failing.]

# Questioning Green Elsewhere

# The Myth of Glorious Renewables

By Vijay Jayaraj, WUWT, Oct 26, 2020

https://wattsupwiththat.com/2020/10/26/the-myth-of-glorious-renewables/

Link to UK study: The Costs of Offshore Wind Power: Blindness and Insight By John Constable and Gordon Hughes, Briefings of Britain, Sep 21, 2020

https://briefingsforbritain.co.uk/the-costs-offshore-wind-power-blindness-and-insight/

### What's Wrong with Wind and Solar?

Video featuring Mark Mills, Prager U, Sep 14, 2020 (5.5 minutes) [H/t Paul deWitt] https://www.youtube.com/watch?v=RqppRC37OgI&feature=youtu.be

### Non-Green Jobs

### **Green Jobs? What About The Industries We Are Destroying?**

By Paul Homewood, Not a Lot of People Know That, Oct 25, 2020

 $\underline{https://notalotofpeopleknowthat.wordpress.com/2020/10/25/green-jobs-what-about-the-industries-we-are-destroying/}$ 

### Funding Issues

### ANZ Bank Demands Carbon Divestment as a Condition of Business Loans

By Eric Worrall, WUWT, Oct 29, 2020

 $\frac{https://wattsupwiththat.com/2020/10/29/australian-anz-bank-demands-zero-carbon-as-a-condition-of-business-loans/}{}$ 

# Major Hedge Fund Manager Demands Big Funds Force Companies to Act on Climate Change

By Eric Worrall, WUWT, Oct 25, 2020

 $\frac{https://wattsupwiththat.com/2020/10/25/major-hedge-fund-manager-demands-big-funds-force-companies-to-act-on-climate-change/$ 

### The Political Games Continue

### **CFACT Challenges Joe Biden to "Spend a Month Without Fossil Fuels"**

By Eric Worrall, WUWT, Oct 15, 2020

 $\underline{https://wattsupwiththat.com/2020/10/25/cfact-challenges-joe-biden-to-spend-a-month-without-fossil-fuels/}$ 

### Litigation Issues

### A Conservative Supreme Court Will be Better for Climate Action

By Charles Hernick, Real Clear Energy Oct 25, 2020

https://www.realclearenergy.org/articles/2020/10/25/a\_conservative\_supreme\_court\_will\_be\_bett er for climate action 581830.html

### On Climate, Amy Coney Barrett Will Be Fair on the Law, and Science

By John Hart, C3, Oct 27, 2020

https://c3newsmag.com/on-climate-amy-coney-barrett-will-be-fair-on-the-law-and-science/

# Barrett punts on climate, oil industry recusals in written responses

By Rachel Frazin, The Hill, Oct 21, 2020

https://thehill.com/policy/energy-environment/522052-barrett-punts-on-climate-oil-industry-recusals-in-written-responses

### Subsidies and Mandates Forever

### Wind PTC: Enough!

By Robert Bradley Jr. Master Resource, Oct 26, 2020

https://www.masterresource.org/production-tax-credit-ptc/wind-ptc-enough/

[SEPP Comment: "Infant industry" tax credits have gone on for almost 30 years, illustrating how difficult it is to get rid of tax credits long after there is no justification for them. The industry would collapse without them, demonstrating how false the claims of politicians supporting the industry are.]

# Subsidies are Blowing in the Wind

By Alan Moran, Quadrant, AU, Oct 29, 2020

https://quadrant.org.au/opinion/doomed-planet/2020/10/subsidies-are-blowing-in-the-wind/

"One of the few pure wind plays is Hepburn Wind. In 2020 the business earned \$111.5 per MWh in energy revenue, 37 per cent of which came from the subsidy from generation certificates. This level of subsidy is seen elsewhere – the US subsidy for wind and solar is estimated at 50 per cent."

[SEPP Comment: No link to the estimate. However, IEA's calculations on the social cost of carbon are fiction.]

### Energy Issues – Australia

Bargain! \$2 billion in solar panels powers SA for whole hour on Sunday in Spring! By Jo Nova, Her Blog, Oct 27, 2020

http://joannenova.com.au/2020/10/bargain-2-billion-in-solar-panels-powers-sa-for-whole-hour-on-sunday-in-spring/

"The ABC claps and asks no hard questions like, how much will it cost? Will it really stop storms? How many degrees cooler will the world be? Are there cheaper ways to reduce CO2 emissions? Does reducing man-made CO2 even change atmospheric CO2 levels? Will we be able to measure the benefit of this ever by any means? Are the Chinese rolling on the floor laughing at our pagan stupidity?"

[SEPP Comment: Includes a graph of energy production by source in South Australia for Oct 11, 2020, another California Duck.]

### Energy Issues -- US

### May America vote to ban fossil fuels?

By Lubos Motl, The Reference Frame, Oct 24, 2020

https://motls.blogspot.com/2020/10/may-america-vote-to-ban-fossil-fuels.html#more

### **Democrats' Energy Dilemma**

By Joel Kotkin, Real Clear Energy, Oct 28, 2020

https://www.realclearenergy.org/articles/2020/10/27/democrats energy dilemma 582008.html

### Maryland, North Carolina, Virginia partnering on offshore wind energy development

By Dominick Mastrangelo, The Hill, Oct 29, 2020

https://thehill.com/policy/energy-environment/523403-maryland-north-carolina-and-virginia-partnering-on-offshore-wind-energy-development

"Planners estimate the project will provide up to 86,000 jobs, \$57 billion in investments and up to \$25 billion in economic output in the next decade."

[SEPP Comment: At no cost to the consumer or taxpayer?]

#### Oil and Natural Gas – the Future or the Past?

# Big Data Essential for Oil & Gas Industry to Become Cleaner and More Efficient

By Paul Steidler, Real Clear Energy,, Oct 26, 2020

https://www.realclearenergy.org/articles/2020/10/26/big\_data\_essential\_for\_oil\_and\_gas\_industry\_to\_become\_cleaner\_and\_more\_efficient\_581993.html

### Nuclear Energy and Fears

### Brussels 'won't stand in the way' of new nuclear plants, says EU climate chief

By Frédéric Simon, EURACTIV, Oct 26, 2020 [H/t GWPF]

https://www.euractiv.com/section/energy/news/brussels-wont-stand-in-the-way-of-new-nuclear-plants-says-eu-climate-chief/

### Alternative, Green ("Clean") Solar and Wind

### The Futility of "Renewable" Energy in Two Easy Charts

By David Middleton, WUWT, Oct 29, 2020

https://wattsupwiththat.com/2020/10/29/the-futility-of-renewable-energy-in-two-easy-charts/

### Alternative, Green ("Clean") Energy -- Other

### Geothermal energy is poised for a big breakout

"An engineering problem that, when solved, solves energy."

By David Roberts, Vox, Oct 21, 2020 [H/t Bernie Kepshire]

 $\underline{https://www.vox.com/energy-and-environment/2020/10/21/21515461/renewable-energy-geothermal-egs-ags-supercritical}$ 

### Alternative, Green ("Clean") Energy -- Storage

# Analysis Suggests Elon Musk's Vision Of A Battery-Powered Society Remains An Unworkable Fantasy

By P Gosselin, No Tricks Zone, Oct 30, 2020

https://notrickszone.com/2020/10/30/analysis-suggests-elon-musks-vision-of-a-battery-powered-society-remains-an-unworkable-fantasy/

### Designing batteries for easier recycling could avert a looming e-waste crisis

By Zheng Chen and Darren Tan, The Conservation, Via WUWT, Oct 25, 2020

 $\underline{https://wattsupwiththat.com/2020/10/25/designing-batteries-for-easier-recycling-could-avert-allooming-e-waste-crisis/}$ 

### Alternative, Green ("Clean") Vehicles

### **Reality Check On The Electric Car**

Guest post by Richard Fowler, CEO Howard Electric Cooperative, MO, WUWT, Oct 30, 2020

https://wattsupwiththat.com/2020/10/30/reality-check-on-the-electric-car/

### Mean and Unclean: Electric Cars Powered by Child Labor in Africa

By Steve Milloy, Junk Science.com, Oct 19, 2020

https://junkscience.com/2020/10/mean-and-unclean-electric-cars-powered-by-child-labor-in-africa/

[SEPP Comment: Photos of cobalt mines in the Democratic Republic of Congo,]

# Battery Issues Continue To Plague Electric Cars...BMW Orders "Large-Scale" Recall Of Plugin Hybrids

Explosive car batteries? BMW recalls large number of electric hybrid cars By A.R. Göhring (Translated by P. Gosselin), No Tricks Zone, Oct 27, 2020 <a href="https://notrickszone.com/2020/10/27/battery-issues-continue-to-plague-electric-cars-bmw-orders-large-scale-recall-of-plugin-hybrids/">https://notrickszone.com/2020/10/27/battery-issues-continue-to-plague-electric-cars-bmw-orders-large-scale-recall-of-plugin-hybrids/</a>

### Carbon Schemes

# CCS can rapidly reduce emissions in sectors that have few other options to decarbonize, EFI/Stanford

EFI, Stanford team release California carbon capture and storage action plan, News Release, Stanford University, Oct 22, 2020 [H/t WUWT]

https://www.eurekalert.org/pub\_releases/2020-10/su-ccr102220.php

Link to report: An Action Plan for Carbon Capture and Storage in California: Opportunities, Challenges, and Solutions

By Staff, : Energy Futures Initiative and Stanford University, Oct 25, 2020 <a href="https://sccs.stanford.edu/sites/g/files/sbiybj7741/f/efi-stanford-ca-ccs-full-rev1.vf-10.25.20.pdf">https://sccs.stanford.edu/sites/g/files/sbiybj7741/f/efi-stanford-ca-ccs-full-rev1.vf-10.25.20.pdf</a>

#### California Dreaming

### Did you hear the one about California fighting wildfires by banning gasoline cars?

The governor's solution is expensive and less effective than other approaches to climate change and wildfires.

By Bjorn Lomborg, Dallas News, Oct 1, 2020

 $\frac{https://www.dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-by-banning-gasoline-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-wildfires-dallasnews.com/opinion/commentary/2020/10/01/did-you-hear-the-one-about-california-fighting-gasoline-dallasnews.com/opinion/com/opin$ 

cars/?mc cid=b157bff4f1&mc eid=da9b256360

Barriers and enablers for prescribed burns for wildfire management in California By Rebecca K. Miller, Field and Mach, Nature Sustainability, Jan 20, 2020 <a href="https://www.nature.com/articles/s41893-019-0451-7">https://www.nature.com/articles/s41893-019-0451-7</a>

#### **BELOW THE BOTTOM LINE**

### If we paint all our cities white, will we get more snow?

By Jo Nova, Her Blog, Oct 24, 2020

http://joannenova.com.au/2020/10/if-we-paint-all-our-cities-white-will-we-get-more-snow/

### **ARTICLES**

Heftier home electricity bills, outages and low interest rates are all helping residential solar companies sell their products to homeowners

By Jinjoo Lee, WSJ, Oct 28, 2020

https://www.wsj.com/articles/pandemic-is-ray-of-light-for-solar-industry-11603882801

TWTW Summary: Not considering equally sharing in the burden of maintaining a reliable system that operates when needed, the reporter writes:

"Between Covid-19 and natural disasters, Mother Nature threw Americans a curveball in 2020. Solar companies are hitting it out of the park.

"Solar panels and battery systems have renewed appeal for people spending far more time in their homes and less certain about the lights staying on. Meanwhile, interest rates have never been lower, making it cheaper for capital-intensive businesses such as Sunrun RUN -4.13% and Sunnova Energy International NOVA -5.87% to raise funds.

"The pandemic was initially disruptive as door-to-door marketing became much more difficult. Residential solar installations were down 23% sequentially in the second quarter, largely due to shelter-in-place orders that imposed restrictions on selling and installing systems, according to a quarterly report from the Solar Energy Industries Association and Wood Mackenzie.

"But the temporary setback was probably what the industry needed to speed up some muchneeded changes. Both Sunrun and Sunnova noted in their most recent earnings calls that they had shifted sales to a digital model. That is probably positive in the long term because digital marketing is more cost efficient than going door to door, according to Sophie Karp, equity research analyst at KeyBanc Capital Markets. Overhead costs, including those involved in customer acquisition, had been rising as a share of residential solar pricing over the years.

"Selling rooftop solar is also easier when potential customers are more aware of their rising electricity bills. Since the pandemic began earlier this year, Americans have had to shift work electricity usage to their homes. In August, residential retail sales of electricity rose 5.8% from a year earlier while the commercial and industrial sectors saw declines of 6.7% and 9.3%, respectively, according to data from the U.S. Energy Information Administration.

"The sticker shock seems to have boosted web traffic to residential solar providers: Average monthly traffic surged 111% for Sunrun so far this year compared with 2019; Sunnova and Vivint Solar saw increases of 48% and 20%, respectively, according to data from SimilarWeb.

"And, while rising unemployment sparked delinquency concerns across the board, residential solar is somewhat shielded because most solar providers require customers' FICO scores to be over 650, according to a recent report from BloombergNEF. Homeowners tend to give priority to solar payments because it is a product that saves them money, the report noted.

"Solar companies are seeing an opportunity to sell battery storage as an add-on to rooftop solar in places such as California, which is still seeing outages due to wildfires. In some cases, they are able to pitch their services to utilities as a grid-service provider—coordinating vast pools of rooftop solar and storage systems to help balance the grid. Sunrun said in its second-quarter earnings call that it had more than \$50 million in awarded or advanced stages of such contracts.

"Despite the steep drop seen in the second quarter, BloombergNEF forecasts that residential solar installations will grow this year compared with 2019. 'The low installation numbers [earlier in the pandemic] didn't reflect the demand for solar; it was more a reflection of how permitting has slowed down, 'said Tara Narayanan, U.S. solar analyst at BNEF. 'There's actually a pretty strong backlog of projects that are awaiting permits, and we're expecting to see a surge in 2021.'"

The article ends with how rosy solar power may be after the election.